



U.S. Fish & Wildlife Service

Accomplishment Report

The **Alpena Fishery Resources Office (Alpena FRO)** is located in Alpena, Michigan and works to meet U.S. Fish and Wildlife Service Fishery and Ecosystem goals within Lake Huron, Western Lake Erie, and connecting waters of the St. Marys River, St. Clair River, and Detroit River. Activities include Aquatic Species Conservation and Management, Aquatic Habitat Conservation and Management, Cooperation with Native Americans, Leadership in Science and Technology, Partnerships and Accountability, Public Use, and Workforce Management – all of which are conducted in alignment with the Service Fisheries Program Vision for the Future. The station is one of many field offices located within Region 3, the Great Lakes Big Rivers Region.

## Aquatic Species Conservation and Management

### Lake Sturgeon Reef Project Presented at the 2006 IAGLR Meeting in Windsor, ON

*Submitted by James Boase  
Fishery Biologist*

On May 24<sup>th</sup> Fishery Biologist James Boase traveled to Windsor, Ontario to attend the 49<sup>th</sup> annual meeting for the International Association of Great Lakes Research. Boase was an invited speaker at the Detroit River International Wildlife Refuge Symposium and gave a presentation titled “Fish Response to Construction of an Artificial Lake Sturgeon Spawning Reef in the Detroit River” and was coauthor on four other talks at the meeting. All of the talks were focused on the recent research results by biologists from Alpena FRO, and our partners with the USGS Great Lakes Science Center, and Michigan DNR Lake Erie Management Unit. Three of the talks focused on success of the artificial lake sturgeon spawning reef located at Bell Isle in the Detroit River. The remaining two talks addressed the near-shore fish communities in western Lake Erie and the discovery of whitefish spawning in the Detroit River which was the first documented occurrence in almost 90 years. Talks and highlights of the meeting can be accessed at <http://www.iaglr.org>.



Approximately 100 researchers and policy makers from the US and Canada attended the symposium. The symposium provided an excellent opportunity to demonstrate how Alpena FRO

is working with state and federal biologists, recreational anglers, and commercial fishers from both Canada and the U.S. to better manage fisheries resources in the Huron Erie Corridor.

This meeting provided an excellent opportunity to explain to the research community, corporate groups and private citizens the Service's mission and efforts to restore native fish in the Great Lakes and how agencies managing species like lake sturgeon and whitefish must work together if restoration is going to be successful. The benefits of native species restoration was clearly defined and explained. The meeting was also an excellent outreach opportunity. This activity is consistent with and supportive of the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

## **Aquatic Habitat Conservation and Management**

### **June Meeting with Otsego Road Commission**

*Submitted by Susan Wells  
Fish and Wildlife Biologist*

On June 15, Biologists Wells and Enterline met with representatives from Huron Pines RC&D and the Otsego County Road Commission to discuss two pending road crossing projects, on Crapo Creek and Gillis Creek. The Gillis Creek project is funded with 2004 Fish Passage money and consist of an undersized perched culvert that will be replaced this fall with a bottomless structure. Gillis Creek is a headwater tributary to the Black River which is a state designated Blue Ribbon Trout Stream. Replacement of the current structure will restore 2 miles of brook trout passage to spawning and nursery areas.



The Crapo Creek project, funded with 2005 Fish Habitat Restoration money, is a bridge crossing on a tributary to the AuSable River which another state designated Blue Ribbon Trout Stream. The bridge is low and narrow and was installed years ago as a temporary crossing. Because the crossing was improperly designed, large amounts of sediment enter the stream at this point and flow directly into the AuSable River. The gravel road washes out annually and many partners have identified it as a problem site. Project planning has begun for this site with expected completion in 2007.

This is an example of collaboration between state and federal government agencies, watershed groups, and non profit organizations to enhance aquatic habitat which will benefit fish and wildlife resources. These projects will enhance fish passage and fish habitat for brook trout into reaches of the Black River Watershed and AuSable River Watershed. This project addresses the Service's Fisheries Program Vision for the Future priority of Aquatic Habitat Conservation and Management.

## Detroit River Refuge Elizabeth Park Meeting

*Submitted by Susan Wells  
Fish and Wildlife Biologist*

On June 27<sup>th</sup>, Biologist Wells met with staff from the Detroit River International Wildlife Refuge, Wayne County Parks Department, Detroit River Alliance, and Nativescape to discuss an upcoming restoration project involving a grant obtained through the US Fish and Wildlife Service Coastal Program. The project will consist of stabilizing 300 feet of riverine buffer strips along the Detroit River on Elizabeth Park the oldest County Park in Michigan.



This project will utilize innovative partnerships to assist to conduct a habitat restoration project. The project, coordinated by the Alpena FRO and the Detroit River International Wildlife Refuge, will reduce sediments directly entering the Detroit River system by restoring natural vegetation and creating buffer zones along the river. Reducing the sedimentation into the river will restore fish spawning and rearing habitats. Further, it will demonstrate innovative techniques for restoring coastal habitat and teach these techniques to other conservation partners in a hands-on volunteer workshop. Soft engineering techniques that will be used to stabilize shorelines along the Detroit River and enhance habitat, will also improve the aesthetics and fishing opportunities.

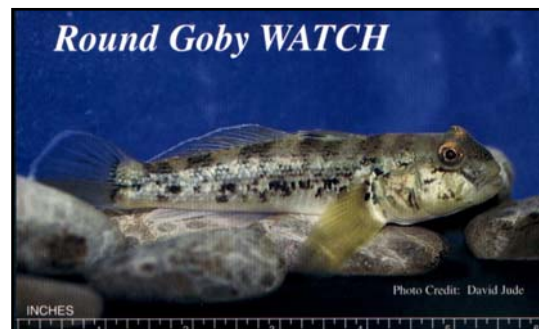
This is an example of collaboration between government and local interest groups to enhance aquatic habitat which will benefit fish and wildlife resources. This project involves collaboration between many partners and addresses the Service's Fisheries Program Vision for the Future priority of Aquatic Habitat Conservation and Management.

## Partnerships and Accountability

### Aquatic Invasive Species Early Detection Workshop Hosted by Tip of the Mitt Watershed Council

*Submitted by Anjanette Bowen  
Fishery Biologist*

Biologist Bowen provided information on the invasive round goby for two Workshops hosted by the Tip of the Mitt Watershed Council on "Aquatic Invasive Species Early Detection". The workshops were held on June 21 in Petoskey, MI and June 22 in Central Lake, MI. They provided information to





concerned lake citizens willing to train others about a number of aquatic invasive species including purple loosestrife, Eurasian watermilfoil, round goby, and others. Participants learned how invasive species harm the aquatic environment, how to distinguish invasives from native species, and how best to combat, control, or take action against their populations.

The Tip of the Mitt Watershed Council is a non-profit organization dedicated to the protection of northern Michigan lakes, streams, wetlands, and ground water through advocacy, education, water quality monitoring, and research.

Partnerships and public education are important tools to combat and prevent the spread of invasive species and help to promote healthy native species populations. This effort is consistent with the Fisheries Program Vision for the Future priorities of "Partnerships and Accountability", "Public Use" and "Aquatic Species Conservation and Management".

## **Alpena FRO Collects Smallmouth Bass in Thunder Bay**

*Submitted by Adam Kowalski  
Fish and Wildlife Biologist*

For two nights Fishery Biologists Adam Kowalski, Anjanette Bowen and Jerry McClain participated in a joint project with Michigan Department of Natural Resources (MDNR) to collect data on Thunder Bay smallmouth bass. The survey was established to provide baseline information on Thunder Bay smallmouth bass for use in evaluating cormorant control efforts being conducted by USDA-APHIS. This information was also needed as part of a larger program to better understand the status of smallmouth bass stocks in Lake Huron, a need identified by the Lake Huron Technical Committee.



Nighttime electrofishing was used to collect fish on June 13 and 14. This effort coincided with MDNR nearshore small-mesh gillnetting that has been used for several years to monitor predator-prey dynamics in Thunder Bay. In total, 33 smallmouth bass were collected in 7 hours of electrofishing. Two areas of the bay were sampled where smallmouth bass habitat was considered ideal. The shoal areas around Partridge Point and Sulphur Island, on the south side of the bay, was sampled the first night and produced 25 of the 33 smallmouth. The rocky shoreline and nearshore reefs on the north side of the bay was sampled the second night and produce the additional 8 fish.

In addition to general biological data, tissue samples were also taken from these fish and provided to the LaCrosse Fish Health Center to conduct bacterial and viral screening. The primary focus was screening for viral hemorrhagic septicemia (VHS) in Lake Huron. Fin tissue

was also taken from the bass by Cal Borden, a graduate student from Ohio who is compiling genetic information on Great Lakes smallmouth bass stocks. Carp were also collected during the second night of sampling at the request of MDNR for annual contaminant monitoring conducted by Michigan Department of Environmental Quality.

This work is consistent with the Fisheries Program Vision for the Future priority of “Partnerships and Accountability” in an effort to develop long term partnerships with States, Tribes, other federal agencies and to develop collaborative conservation strategies for aquatic resources.

## Whitefish Research in the Huron Erie Corridor Highlighted in the Toledo Blade

*Submitted by James Boase  
Fishery Biologist*

Fisheries scientists from Alpena FRO and the USGS Great Lakes Science Center discovered the presence of spawning whitefish in the Detroit River last winter for the first time since 1916. News of the discovery was first announced in the Toledo Blade on May 23<sup>rd</sup> and can be found on their website at

<http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20060523/COLUMNIST22/605230319&SearchID=73250341699796>.

The work conducted last fall was part of the preliminary research for a larger study that is scheduled to begin in the fall of 2006 and continue until the spring of 2008. Funding for the research is provided, in part, by the Service's Science Support Program (SSP). The goal of the project is to identify fish use of recently created and historical spawning habitats in the Detroit River. During the spring, species specifically targeted will include lake sturgeon and walleye, while whitefish will be the species of interest in the fall and winter.

Whitefish are currently the most sought after commercial species in the Great Lakes and at one time they were harvested in huge numbers in Lake Erie. The fishery collapsed for a number of reasons but spawning habitat loss and pollution were identified as primary reasons for the decline. At the turn of the century the Detroit River supported huge numbers of spawning whitefish because at that time the river was composed of many braided, shallow channels. Those historical channels were composed primarily of limestone bedrock, rock and gravel, habitats that are needed for successful spawning by not only whitefish but also many other species of native fish like lake sturgeon and walleye. In 1972 the U.S. Clean Water Act and the U.S.- Canada Great Lakes Water Quality Agreement in 1972 were signed and since then the Detroit River has seen a steady decline in pollution related problems. Ultimately the goal is to clean up the river and provide adequate habitat that will eventually lead to the re-establishment of species like whitefish and lake sturgeon.



This effort provided an opportunity to enhance our partnership with the U.S. Geological Survey - Great Lakes Science Center and the Michigan Department of Natural Resources to achieve common Great Lakes management objectives. Maintaining these collaborative relationships allows for the most efficient use of limited human and fiscal resources. This project is consistent with the “Partnerships and Accountability”, “Aquatic Species Conservation and Management”, and “Leadership in Science and Technology” focus areas of the Fisheries Program Vision for the Future.

## **USFWS Participates in Invasive Species Field Course Hosted by Inland Seas Education Association**

*Submitted by Anjanette Bowen  
Fishery Biologist*

On June 20, Barry Matthews (Ludington Biological Station) and Anjanette Bowen (Alpena Fishery Resources Office) with the U.S. Fish and Wildlife Service (USFWS) were invited to participate in an Invasive Species Field Course hosted by Inland Seas Education Association (ISEA) and held at the Great Lakes Campus of Northwestern Michigan College in Traverse City, MI. The course educates teachers from across the Great Lakes Region about invasive species issues and allows them the ability to directly interact with invasive species researchers from a number of management agencies.



Barry Matthews provided a video with information on sea lamprey in the Great Lakes - showing the history behind their invasion, life cycle characteristics, and current methods of control. Bowen provided a PowerPoint presentation with information on problems associated with ruffe and goby, identifying characteristics, and their current distribution. Preserved invasive specimens, similar looking native species, and identification cards were provided to aid in proper identification.

Other management agencies that participated in the course included Michigan Sea Grant, NOAA-GLERL, MDEQ, U of M, and DTE Energy. A number of teachers presented information as well. Over 30 teachers attended the course which was held from June 19-21.

ISEA is a non-profit organization whose mission is to provide a floating classroom where people of all ages can gain first-hand training and experience in the Great Lakes ecosystem.

Partnerships and public education are important tools to combat and prevent the spread of invasive species and help to promote healthy native species populations. This effort is

consistent with the Fisheries Program Vision for the Future priorities of "Partnerships and Accountability", "Public Use" and "Aquatic Species Conservation and Management".

## **Leadership in Science and Technology**

### **Alpena FRO Staff Participate in Great Lakes VHS Conference Call**

*Submitted by Jerry McClain  
Fishery Biologist*

On June 29, Project Leader McClain, Biologists Boase and Bowen, and Student Trainee Ania participated in a conference call discussing status and concerns related to recent epizootics associated with Viral Hemorrhagic Septicemia (VHS) in the Great Lakes. Participants in this large conference call included representatives from each of the Great Lakes states, federal and provincial representatives from Canada, USDA-APHIS, NOAA, several university researchers and Service representatives from Regions 3, 5 and 9.

Several fish kills in lakes Ontario, Erie, St. Clair, and Huron have been confirmed to be associated with VHS and others are suspected. The fish kills involve a broad array of species and raise several management related concerns around the Great Lakes. Alpena FRO participation in the call was extremely important, particularly as it relates to the field work we are conducting in the Huron-Erie corridor (HEC) which has been an area particularly hard hit by these fish kills. Information on virulence and modes of transmission will likely change station protocols for sharing gear and working in the HEC to prevent inadvertent spread of the virus. Participants in the call were added to a list of contacts who will receive routine updates as new information becomes available.

Interagency cooperation and collaboration on issues or concerns of common interest are an important element in management of the Great Lakes fisheries. The fish disease concerns discussed on this call will benefit Service and partner operations in the Great Lakes and is critical for a coordinated approach to addressing a potentially serious emerging issue. Service participation in this call is consistent with and supportive of the "Partnerships and Accountability", "Aquatic Species Conservation and Management" and "Leadership in Science and Technology" priorities of the Fisheries Program Vision for the Future.

## **Public Use**

### **Hubbard Lake Kids Fishing Day**

*Submitted by Aaron Woldt  
Fishery Biologist*

On June 10, Fishery Biologist Aaron Woldt staffed a Service information booth at the Hubbard Lake Kid's Fishing Day festival. This festival, sponsored by the Hubbard Lake Sportsmen and



Improvement Association, is an annual event designed to educate age 5 to 13 children about local fish populations and recreational fishing. Biologist Woldt distributed Service pamphlets and lectured to ten groups of approximately 10 children each, their parents, and other interested public regarding sea lamprey and sea lamprey control. Woldt described the time-line and path of sea lamprey invasion of the Great Lakes, negative impacts of sea lamprey predation on native fish species like lake trout and lake whitefish, biology of sea lamprey populations, unique anatomy of sea lamprey that leads to efficient predation on fish species, and sea lamprey control techniques employed by the Service including chemical treatment of juveniles, trapping of adults, in-stream barriers, and the sterile male release program. Each lecture also included a hands on demonstration of sea lamprey anatomy using live sea lamprey.

The Hubbard Lake Kid's Fishing Day festival is a large outreach event that allows Alpena FRO staff to meet and interact with groups of local children and parents to provide information about Service programs. This outcome is consistent with the Service's goal of implementing educational and outreach activities to educate public regarding Service activities under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future.

## Lake Sturgeon Recovery Efforts Highlighted in Local News and on Pubic Television

*Submitted by James Boase  
Fishery Biologist*

It has been four years since researchers from Michigan Sea Grant, USGS, Michigan DNR, and Service first sat down to brainstorm on the idea of constructing an artificial lake sturgeon



spawning reef in the Detroit River. Those early planning meetings, the research that followed, construction of the reefs, and the history of lake sturgeon were highlighted in a documentary titled "Giants in the River" which aired on Detroit Public Television on April 30<sup>th</sup>. Researchers and partners from Michigan Sea Grant, USGS, Michigan DNR, DTE Energy, JJR Consulting, and the Service were interviewed in the documentary.

A special screening of the documentary along with a special lake sturgeon exhibit was held at the [Detroit Science Center](#) (Center) the week prior to the airing. Patricia Charget, a Detroit Free Press Staff Writer, covered the story for the paper

([www.freep.com/apps/pbcs.dll/article?AID=/20060427/YAK01/604270339/1073/YAK](http://www.freep.com/apps/pbcs.dll/article?AID=/20060427/YAK01/604270339/1073/YAK)).

Director of the project Jennifer Read (Michigan Sea Grant), hosted the event. Sea Grant developed the exhibit at the Center, as well as a web site. For more information, see the Sturgeon Web site at [www.miseagrant.umich.edu/sturgeon/sturgeon\\_exhibit.html](http://www.miseagrant.umich.edu/sturgeon/sturgeon_exhibit.html). The site includes information about the exhibit, the history of lake sturgeon and a sturgeon quiz. All of the partners involved in the project attended the screening. John Hartig, Manager of the Detroit River International Wildlife Refuge (DRIWR), and James Boase, Alpena FRO (FRO) Fishery Biologist, represented the Service. From February until August, teachers, students and fishing



enthusiasts will find a life-sized lake sturgeon model, and can pick up a copy of the documentary on DVD at the Center.

This collaborative effort provided an excellent opportunity to broadcast to a large public audience and provided an opportunity to explain the Service's mission and the FRO and DRIWR role in providing assistance for management of Great Lakes fish and wildlife resources. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the FRO and DRIWR have in this endeavor. This effort supports the "Public Use", "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

## **Friday Nights Downtown**

*Submitted by Heather Rawlings  
Fish and Wildlife Biologist*

Alpena FRO Biologists Anjanette Bowen and Heather Rawlings organized a Service booth for the evening of June 30, 2006, the first night of Alpena's "Friday Nights Downtown". The event, held every Friday night for the month of July, focuses on fun for the family, and all downtown businesses stay open for the event. The booth contained an aquatic nuisance display, pamphlets and informational brochures, coloring books and several games for children including a fish puzzle and fish family game.



Several hundred people visited the booth. A local band, vendors, and an emphasis on children's activities such as face painting and balloon tying contributed to the relaxed atmosphere. The Alpena FRO will participate in the final "Friday Nights Downtown", scheduled for July 21<sup>st</sup>.

Approximately 400 people attended the first "Friday Nights Downtown" of the season. The Service booth emphasized ANS and general fisheries education. Completion of ANS educational projects contribute toward the "Public Use" and "Aquatic Species Conservation and Management" priorities of the Service's Fisheries Program Vision for the Future.

## **Alpena Lifelong Learners Presentation on Asian Carp**

*Submitted by Anjanette Bowen  
Fishery Biologist*

On June 8, 2006, Biologist Bowen presented information on Asian carp as part of the Alpena Lifelong Learners 2006 Seminar Series. Asian carp refer to four species of non-native carp

(bighead carp, silver carp, black carp, and grass carp) that have become established and are spreading within the Mississippi River and its tributaries. Within the Mississippi River they have become very abundant, reduced the diversity of native species, and are a hazard to water users. They are currently poised to enter the Great Lakes basin.



A PowerPoint presentation was used to relay information about Asian carp at the seminar.

Topics included Asian carp characteristics, identification, current distribution, concerns, and the effort to slow their spread into the Great Lakes via the Chicago barrier project. Information was provided on what the public can do to prevent the spread of Asian carp and other invasive species. A video recorded by the Illinois Natural History Survey of the jumping behavior of silver carp was also shown. There were a number of questions from those attending. Education about the problems invasive species cause and about what the public can do to combat invasive species is key to preventing their spread to new areas.

Public education about invasive species is an important means of preventing their spread and helps to promote healthy native species populations. This effort is consistent with the Fisheries Program Vision for the Future priorities of "Public Use" and "Aquatic Species Conservation and Management".

## Workforce Management

### 2006 MOCC Course – Ludington, MI

*Submitted by Aaron Woldt  
Fishery Biologist*

Fishery Biologist Aaron Woldt of the Alpena FRO served as lead instructor for a Department of Interior (DOI) Motorboat Operator Certification Course (MOCC) at the Ludington Biological Station from June 27 to 29, 2006. Kevin Butterfield (Ludington Biological Station), Deb Winkler (Marquette Biological Station), and Region 3 MOCC Coordinator Dave Wedan (LaCrosse FRO) co-instructed the course. The primary goal of this course was to train Service employees to safely operate motorboats in the work environment. DOI Policy 485 DM 22 requires operators of all department watercraft to successfully complete MOCC training and complete refresher MOCC training every 5 years thereafter.

Woldt, Butterfield, Winkler, and Wedan staged an



informative, well organized course that included classroom, pool, and on-water instruction. Instructors lectured on topics ranging from boat orientation, state boating regulations, boat and trailer maintenance, emergency procedures, rules of the road, aids to navigation, towing, anchoring and beaching, slow and at-speed maneuvers, marlinspike, fire suppression, and weather. Seven students from the Ludington Biological Station and the Carterville FRO received training and successfully earned MOCC certification.

MOCC training and refresher training are valuable curricula designed to make Service personnel competent and safe boaters. Teaching MOCC courses is consistent with the Service's goal of providing employees with opportunities to maintain competencies, improve opportunities for professional achievement, and safely perform their jobs under the "Workforce Management" priority of the Fisheries Program Vision for the Future.

## **Annual Fire Extinguisher Safety Training**

*Submitted by Anjanette Bowen  
Fishery Biologist*

Alpena FRO staff participated in annual fire extinguisher training on June 6, 2006. Training was provided by Great Lakes Fire and Safety Equipment. Township Firefighter Jim Saylor conducted the training. Information was provided on the variety of fire extinguisher types and all staff were allowed to extinguish a live fire. Fire extinguisher training is required safety training and is particularly of value to Alpena staff that work in remote areas of the lake. Safety training is essential to protecting staff and the public during emergency situations and meets the Fisheries Program Vision for the Future priority for "Workforce Management".



## **Service Biologist Attends AD Model Builder Training**

*Submitted by Aaron Woldt  
Fishery Biologist*

From June 12 to 13 Fishery Biologist Aaron Woldt of the Alpena FRO attended an AD Model Builder (ADMB) Advanced Fishery Applications training at the Quantitative Fisheries Center at Michigan State University. The primary goal of this course was to expose students to relatively advanced topics regarding the use of the software ADMB in building and parameterizing fisheries based models (e.g. statistical catch at age, surplus production, growth). Topics covered included methods for assessing uncertainty in models, review of available ADMB functions, instruction on writing functions and model code, advice to make coding more efficient, implementing control programs, and building simulation models to test existing fishery models.

Woldt will use knowledge gained from this training in his role as Chair of the Modeling Subcommittee (MSC) of the Technical Fisheries Committee. The MSC, comprised of 7 partner agencies, annually updates ADMB based statistical catch at age models for 9 lake trout and 17 lake whitefish units in 1836 Treaty waters and sets harvest limits as dictated by the Year 2000 Consent Decree. MSC members continually strive to improve catch at age models, and training such as this gives members the tools needed to make improvements.

Continued educational opportunities such as university sponsored training is consistent with the Service's goal of providing employees with opportunities to maintain competencies and improve opportunities for professional achievement under the "Workforce Management" priority of the Fisheries Program Vision for the Future.



### **Alpena FRO Accomplishment Report**

**June 2006**

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For more information on Alpena FRO programs and activities or to view other station reports visit our website located at <http://www.fws.gov/midwest/alpena/>.